

A COLLECTION OF BIRDS FROM THE NAGA HILLS

BY

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(With two maps, two coloured and two black-and-white plates)

During the summer of 1950 my wife and I arrived in India hopefully looking forward to a project which we had cherished for some time in common with Mr. Sálím Ali, namely to visit the eastern Naga Hills, and perhaps to attempt to climb Mt. Saramati (12,553 ft., a.s.l.) which lies almost directly east of Kohima, the Deputy Commissioner's headquarters, on the India-Burma border. Saramati has never been climbed by a naturalist, or so far as I know by any non-Naga (although a Karen in the Burma Cartographic Survey is alleged to have climbed it in 1935), and it is the highest summit in southern Asia south of the Himalayas, excluding the Islands.

The Naga Hills have had no intensive visits by naturalists. Major H. H. Godwin-Austen visited the Hills during 1872-73 and reported the novelties discovered by him in the *Proceedings of the Zoological Society*, 1874, Pt. 1., pp. 43-48, with several fine coloured plates of some of the distinctive forms such as *Garrulax galbanus* and *Actinodura nipalensis waldeni*. The comprehensive paper by Hume on the birds of Manipur (1888) includes many notes of the occurrence of birds in the Naga Hills, usually furnished by Godwin-Austen, or from the collections made by two other surveyors associated with him, Messrs. Ogle and Chennell. However, there has been no general paper of any kind. In the case of mammals there have been isolated notes from time to time, mostly from the pen of J. H. Hutton and J. P. Mills, both distinguished former Deputy Commissioners.

Unfortunately Mr. Sálím Ali was unable to come with us in the end, and in the meantime the great Assam earthquake had necessarily diverted the facilities of Government, so that it was found to be impossible to lend us the escort of Assam Rifles which by Government Regulation we would need to visit the unadministered territory of the extreme eastern Hills. We arrived at Kohima in October, however, to find that the Deputy Commissioner, Mr. S. J. Duncan was extremely conscious of our disappointment and graciously made every effort to afford us 'second best', and make our visit as profitable as possible in the short time that we stayed in the Hills.

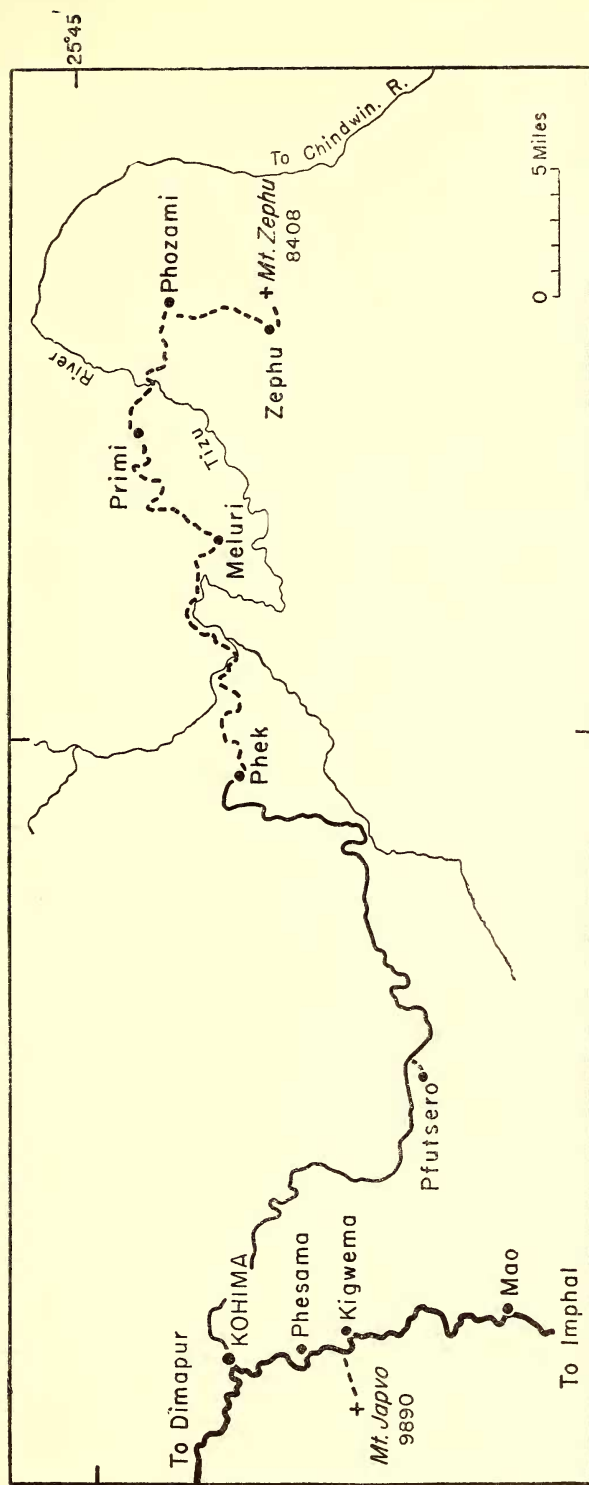
After a brief stay in Manipur from October 17-25, we returned to Kohima and were allowed by Mr. Duncan to arrange for a trek up Mt. Japvo, the highest peak of the Barail Range (9,890 ft.) which lies about 5 miles southwest of Kohima in an air line. The Barail Range is a massive feature thrusting in a north-easterly direction, composed of slate and shale with heavily wooded peaks lying both in north Cachar and the western Naga Hills. We were able to leave for Japvo on November 2 and to stay there until the 13th. We made our camp at 7,700 ft. under a thick canopy of original tropical ever-green rain forest, climbing up to the ridge at 8,500 ft. and the peak

beyond each day, or plunging down into the lower slopes. Birds abounded but were difficult to see and collect due to the great height of the trees, and the density of the undergrowth wherever trees had fallen, and small clearings occurred. Most of the small birds were in vast hunting parties at all stages in the forest, from the tree tops, through the understoreys of lower trees, higher bushes, and finally the lowest level of strobilanthes, ferns, nettles, and rotting brush resting on the ground. Serow, barking deer, sambar, wild dogs, tiger and possibly goral were all noted in one way or another. The only smaller mammals seen were two species of Tree Squirrel belonging to the genera *Dremomys* and *Tamioops*.

Returning to Kohima my wife had unexpectedly to leave suddenly for the United States, but meanwhile permission had been granted by the Assam Government for us to visit the extreme eastern Hills, as far east as we could go and still remain within the administered area. This would allow us to go right up to the Burma border in one small area where the Tizu River, a tributary of the Chindwin, flows through a gap in the main north-south axis of the Naga-Patko Range just south of Saramati. Not far from the trail which lies along the course of this river is a small mountain, Zephu, (8,408 ft., a.s.l.) which I felt would afford us an opportunity to sample the montane fauna of these eastern Hills.

Consequently I made preparations to go on east, accompanied this time by Mr. Horace Alexander and Professor D. C. Mahanta of Gauhati University. We started this part of our trip on November 18th in a heavy downpour of rain in two wartime Dodge weapons carriers or 18 cwt. four-wheel drive trucks. The first 54 miles of the trail east from Kohima to the eastern Angami village of Phek is motorable (Phakekedzumi is an alternate spelling of this village on the quarter-inch Survey of India Maps, Sheet No. 83 K), although 'motorable' seems a charitable word especially if the weather is unseasonable (*N.B.* November and December are technically known as the 'dry' months in the Naga Hills). Farther east there is a trail which was probably jeepable during war-time, but has now become impassable for vehicles due to the demise of all the steel cable suspension bridges and the substitution for them of the locally-made rattan cane pedestrian suspension bridges. We continued along this trail to Meluri, Primi (called Akhegwo on some maps), and Phozami (called Yisi on some maps), the latter some 93 miles by trail from Kohima and 15 miles from the Burma border.

At this point Professor Mahanta and I (Mr. Alexander's holiday had come to an end and he returned to Delhi), left the trail and struck south some 9 miles or more to Zephu where we made camp 200 ft. below the summit and remained only four days until December 1st. This point is about eight and a half miles from the nearest point on the Burma border. It was cold on Zephu, the temperature hovering in the low forties (F.) during much of the day, with several degrees of frost at night. The Nagas disliked the cold and remained in the nearby Sangtam Naga village of Zephu (7,000 ft.) as much as they could. Zephu, like Japvo, was all untouched tropical evergreen forest, with the addition of more types of hill bamboo than we had seen on the Barail peak. Only above 7,000 ft. is there likely to be unspoiled evergreen forest to-day in the Naga Hills, so great is the



Map of the Naga Hills showing our route.....

extent of the shifting cultivation. The effect is almost of 'islands,' as the patches of unspoiled jungle are often quite isolated from each other.

We reached Phek again December 5th, Kohima December 11th, and I left the Naga Hills December 12th. We thus had a total of 48 days in the Naga Hills during which we managed to collect 743 specimens representing 196 species and subspecies. In addition we saw, but did not collect, at least five species (I have not listed an owl and several hawks whose identification would be problematical), making a total of 201 species identified in the field.

With the exception of our two visits to heavy undisturbed evergreen forest on the summits of Japvo and Zephu, our collecting was mainly confined to what is now the predominant biotope in the Naga Hills from the lower altitudes of 2,000 ft. up to 7,000 ft. This is cut-over scrub mostly of a deciduous type which may be firewood lots for the Naga villages, sometimes second growth from old agricultural clearings, sometimes patches of scrub jungle near villages kept by the Nagas for toilet areas. In these somewhat unpromising surroundings there is often a wealth of bird life due to the fact I suppose that birds may be moving from one jungle area to another, or that particular shrubs or trees may be in flower. Much of the thick tangle of light jungle is of course very suitable for babblers, and they were always in evidence. Larger species like hornbills, pheasants, eagles, and the large owls were much less in evidence, however, and there is no doubt that the destruction of the forests here is having a decisive effect on the numbers of different species. Some species will decrease sharply, others increase, and a survey of the fauna in this area in another few years should prove illuminating.

Attempting to assess the fauna as a whole I was interested to note that out of 125 species which could be divided into more predominantly western or eastern-derived forms, 54 species of these Hills were of the same species as those farther to the west in the Himalayas proper, while 28 were of Burmese or Indo-Chinese origin. The other 43 were either endemic species or subspecies whose origin either from the west or east was uncertain. Thus 65 per cent of the endemisms studied by me seem to derive from the western, the Himalayas fauna, and only 35 per cent from the Indo-Chinese fauna, a smaller proportion than I had expected before I visited these border Hills.

There are only two good endemic species in this area apparently, both shared with Manipur, *Tragopan blythi* and *Garrulax galbanus*. Of the endemic subspecies 27 seem to be confined to this immediate area or shared with Manipur (17), the Patkoi Hills (7), or Cachar (14). Many of these endemisms run south as far as the Chin Hills (Mt. Victoria) (9). I am certainly sorry we did not get a chance to collect on the higher slopes of Saramati which we could see plainly from Meluri east along the trail. The upper 3,000-4,000 ft. appear to be grassland, and there should possibly be a wren, *Troglodytes*, a *Babax*, possibly a Nutcracker, and probably a Yellow-billed Blue Magpie on the upper slopes. But this problem will remain for another attempt. I certainly wish much luck and God-speed to the ornithologist who visits that challenging mountain.

Some of the novelties collected by us have already been described by me in *Postilla*, a publication of the Yale Peabody Museum (no. 6, 1951). My grateful thanks are due to the authorities of the British Museum, the United States National Museum, the American Museum of Natural History, the Museum of Comparative Zoology at Harvard, and the Chicago Natural History Museum who have lent me specimens in their care, or allowed me to work in their Bird Rooms. I am grateful for some financial aid received from a Fulbright award of the U.S. Government. For help in the field I am most grateful also to Mr. and Mrs. Duncan of Kohima, to many Naga friends, to Horace Alexander, and finally to my wife Mary, who was a constant aid and source of inspiration.

LIST OF THE SPECIES

PHALACROCORACIDAE

Phalacrocorax carbo sinensis (Shaw): Large Cormorant.

A flock of 31 was counted on an evening flight up the Tizu River near our camp between Meluri and Phek, December 4th. The Assam Rifles and the Phek Nagas consider these birds to be 'ducks' and shoot them for food from time to time.

ARDEIDAE

Cattle Egrets (*Bubulcus ibis*) seemed to be the only common egret in the areas we visited. Flocks of egrets, presumably this species, were seen flying south over Kohima in mid-November evidently on migration.

CICONIIDAE

Anastomus oscitans (Boddaert): Open-bill Stork.

A single bird was secured out of a flock which landed near the Deputy Commissioner's office building in Kohima evidently lost as there was heavy cloud all over the ridge. The date was in the first week of November. Presumably the birds were on migration as the rest of the flock flew south after the clouds lifted.

ACCIPITRIDAE

Accipiter nisus nisosimilis (Tickell): Sparrow Hawk.

A male was shot November 17th out of a pine tree behind the Circuit House in Kohima. It seemed to be a migrating bird.

Very few hawks were seen, and those that occasionally were glimpsed through the trees could not be readily identified.

FALCONIDAE

Falco tinnunculus interstinctus McClelland: Indian Kestrel.

A male collected at Kohima, October 26th, was the only specimen we secured of this species which was very common in open areas all up and down the Naga Hills.

PHASIANIDAE

Lophura leucomelana lathamii (Gray): Assam Kaleej, or Horsfield's Kaleej.

Common from 2,000 to 5,000 ft. in the Naga Hills. Males with varying amounts of white on the rump sometimes were brought in to the Kohima market. Some males closely approached *moffiti*, (see Delacour's discussion, 1951), as did some females, in possessing a nearly black rump and very dark plumage. A possible range for *moffiti* may be in the Sylhet area west of the Naga Hills, if the specimens obtained by us represent a trend in the direction of the all-black form. A bird dealer in Calcutta informed me that the shipment of Kaleej pheasants sent to London in the spring of 1950 which included a male *moffiti*, came from north-eastern East Pakistan not far from where the Barail Range of Cachar debouches into the plains of Sylhet.

Tragopan blythi blythi (Jerdon): Blyth's Tragopan.

Blyth's Tragopan is not uncommon on the slopes of Mount Japvo about 8,400 ft. in moss forest. Our Naga helpers assured us that the birds are very fond of certain ferns and showed us many stripped fronds of a rather coarse branching bracken-like species growing in the under-storey. The species from our experience is very local, confined to thick forest, and partially migratory, moving up and down the slopes presumably in search of favorite foods. With the great destruction of forests in the Naga Hills due to shifting cultivation practices, it would seem likely that the range of this species will be fragmented into isolated colonies, if this has not happened already. We could not obtain any information about the species in the eastern hills, where it apparently does not now occur.

A male from near Khonoma on the northern flank of the Japvo complex has a wing measurement of 263 mm. and a culmen of 25.5, considerably longer than that given by Delacour (op. cit. 1951, p. 68). Presumably his measurement is of the bill from the nostril, rather than the culmen as stated.

No specimens of Mrs. Hume's Pheasant (*Syrnaticus humiae humiae*) were secured although we heard something of them. Local information indicated that they are quite as spottily distributed as the tragopan, and now found only in isolated patches of scrub oak forest from 4,000 to 6,000 ft. In the southern Naga Hills they are confined to the Manipur side of the Kohima-Imphal Valley south of Karong, and to a few places in the hills south of Jessami, a village nearly 30 miles as the crow flies east and slightly south of Kohima.

Bambusicola fytchii hopkinsoni Godwin-Austen: Bamboo-Partridge.

A foothill species found in open scrub and pasture land up to 5,000 ft. Birds were moulting in October.

The guttural rolling call of Peacock Pheasants (*Polyplectron bicalcaratum*) was heard along the banks of the Tizu river at about 1,000 ft. altitude east of Meluri, but no specimens were collected. In connection with this species, I have re-examined the two fans of Peacock Pheasant feathers collected by me in the Mishmi Hills in 1947, and mentioned in Delacour (op. cit., 1951, p. 289). I have also borrowed a pair of Gray Peacock Pheasants from the British

Museum collected in the Fort Hertz area of extreme north Burma by Ronald Kaulbach in 1938. These specimens show a cline toward the very dark coloration of the tail feathers shown in my Mishmi fans, but can still be placed with typical *bicalcaratum*. I had hoped that these specimens collected from the hills south-east of the Mishmis in the upper central drainage area of the Irrawady, might belong to this same saturated population, but they only point toward it.

Arborophila torqueola interstincta Ripley: Hill-Partridge.

The Hill-Partridge was only found by us on the upper slopes of Mount Zephu at over 8,000 ft. On comparison in the United States I found that these birds agreed with those from the upper Chindwin River area of Burma in being more richly and darkly coloured and more heavily barred than *torqueola* of the Sikkim Himalayas.

The birds were silent during our stay on the mountain in late November and early December, only occasional low calls being heard. They were unsuspicious, however, and easier to stalk than in my previous experience, scratching busily among the leaves in growths of light bamboo under the oak over-storey.

Arborophila rufogularis intermedia (Blyth) : Arrakan Hill-Partridge.

A single male was collected on Mount Zephu in identical biotope with *torqueola*. Soft parts: iris brown; ocular skin pinkish-red; bill black; legs anteriorly light brownish-pink, posteriorly yellowish-brown.

TURNICIDAE

Turnix tanki blanfordi Blyth: Burmese Button-Quail.

A female with a wing measurement of 101 mm. was taken at Kohima. Iris pale yellow; bill, upper mandible brown, lower and gape dull yellow; feet dull yellow. Weight 63 gr.

CHARADRIIDAE

Charadrius dubius curonicus Gmelin: Eurasian Little Ringed Plover.

A female, evidently in passage, was taken at Kohima, October 15th. Weight 30 gr.

COLUMBIDAE

Sphenurus sphenurus sphenurus (Vigors): Wedgetailed Green Pigeon.

Relatively common from 3,750-7,700 ft., in substage, cut-over scrub and high up in original forest. Soft parts: iris pinkish, inner blue ring; bill basally blue, distally gray; feet cherry red.

Ducula badia griseicapilla Walden: Grayheaded Imperial Pigeon.

A pair were taken at Phek in a patch of jungle on top of a near by hill at 6,000 ft. Iris gray; bill basally coral, distally brownish-horn; feet coral.

Columba pulchricollis Hodgson: Ashy Wood-Pigeon.

A female, one of a pair in a bamboo clump, was shot as it rose from the ground with a clap of wings, on Mount Zephu at 7,000 ft., December 1st. Iris gray; bill basally purplish, distally dull pea green; feet splotched dull red on white. Wing 198.5 mm.

I saw a flock of *Columba punicea* near Phek in cut-over scrub but was unable to secure a specimen.

Streptopelia orientalis agricola (Tickell): Burmese Rufous Dove.

Uncommon in the Naga Hills, perhaps due to the proclivities of the Nagas. Birds were in breeding condition in late October.

Streptopelia chinensis suratensis \geq **edwardi**: Spotted Dove.

Baker (1928, p. 243) notes that birds from Cachar and Manipur are intermediate between *suratensis* and *tigrina*. I would prefer to align the specimens collected by us somewhere between *suratensis* and *edwardi* of North Lakhimpur (see Ali and Ripley, 1948, p. 13). In the reduction of the terminal spots on the back they are as Baker writes (loc. cit.) approaching *tigrina*, but the tone of the upper plumage is dark approaching *edwardi*. In size, males have wing measurements from 143-146 mm., and weighed from 120-125 gr. Males and females were in breeding condition in mid-October, and a male with slightly enlarged gonads was taken November 22nd.

Macropygia unchall tusalia (Hodgson): Bartailed Cuckoo-Dove.

We collected two females of the Cuckoo-Dove in occasional patches of evergreen forest standing in the ravines leading down to the Tizu River on the trail between Phek and Meluri. The altitude ranged from 2,500 to 3,000 ft.

Chalcophaps indica indica (Linnaeus): Emerald Dove.

A juvenile female was collected on Mt. Zephu November 28th at 7,500 ft. Weight 98 gr.

PSITTACIDAE

Psittacula himalayana finschi (Hume): Burmese Slatyheaded Parakeet.

Two adult females were taken out of fig trees in open deciduous forest along the Phek-Meluri road between 2,500 and 3,500 ft. Wing 147.5, 150 mm. Weight 112, 115 gr.

Psittacula alexandri fasciata Müller: Redbreasted Parakeet.

A pair were taken at 2,000 ft. out of fig trees feeding in a flock as with the preceding species. Wing ♂ 171, ♀ 155 mm.

CUCULIDAE

Cuculus sparveroides sparveroides Vigors: Large Hawk-Cuckoo.

A female from Kohima has a wing measurement of 225 mm.

Rhopodytes tristis tristis (Lesson): Large Greenbilled Malkoha.

Two males from the Naga Hills have wing measurements of 164.5, 167, tail 381, culmen 31, 32 mm. Weight 135 gr. These birds approach *saliens* Mayr, although not as much so as the virtual intermediates from the north in the Mishmi Hills.

STRIGIDAE

Otus scops sunia (Hodgson): Indian Scops Owl.

A rather rufescent male with a wing measurement of 146 mm. was taken at Kohima. Weight 79 gr.

Glaucidium cuculoides austerum Ripley: Eastern Himalayan Barred Owlet.

Two females taken in the eastern part of the Naga Hills prove to belong to this large dark race. Their wing measurements of 161 and 162 mm. are, however, larger than any given by me in my review of the species (1948). In tone, these birds are strongly rufescent. The bill measurement is 15 mm. (2). They thus extend the range of *austerum* south from Margherita along the Patkoi Range to the east Naga Hills.

Glaucidium brodiei brodiei (Burton): Collared Pygmy Owlet.

A male was taken at Phek. Weight 53 gr.

CAPRIMULGIDAE

Caprimulgus macrurus ambiguus Hartert: Jungle Nightjar.

A pair taken at Mao by Nagas for food and sold to us, are very dark in tone and large, wing ♂ 209.5, ♀ 204.5 mm., and therefore presumably belong to this race.

TROGONIDAE

Harpactes erythrocephalus erythrocephalus (Gould): Redheaded Trogon.

A male from Phek has a wing of 142 mm. and weighed 110 gr. We saw trogons from 4,000-5,000 ft. in the east Naga Hills in thick low secondary oak scrub, as well as in high forest.

MEROPIDAE

Nyctiornis athertoni athertoni (Jardine & Selby): Bluebearded Bee-eater.

A female taken along the Phek-Meluri road measures: wing 136, tail 129 mm.

BUCEROTIDAE

Aceros undulatus ticehursti (Deignan): Northern Waved Hornbill.

A male with the casque indicating that it was a young bird was shot at Phek in the patch of evergreen on top of a nearby hill at

6,000 ft. Several immensely tall trees stood out over the surrounding ones and served as perches for a group of a dozen of these hornbills who performed a morning and evening flight to and from the roost. Their majestic procession was punctuated with the sound of their wings, a rhythmic beat sounding like the puffing pant of a steam engine headed up a long, hard grade. On the slopes of Japvo we also saw and heard these birds without obtaining a specimen. From time to time they would dive abruptly to lose altitude, and the sound on these occasions was very much like the 'whoosh' of a jet plane.

Soft parts: iris dull orange, inner ring white; ocular skin dark pinkish-yellow; bill basally reddish-horn, distally whitish-ivory; gular skin orange-yellow with a median transverse band, blackish in colour; feet black, pads dirty yellowish-white.

CAPITONIDAE

Megalaima virens magnifica Baker: Assam Hill Barbet.

A male and two females from Phek have wing measurements of, ♂ 142.5, ♀ 146, 148 mm. At our Japvo camp the Nagas claimed that this was the bird which occasionally punctuated the night with a wild and awful series of shrieks, moving rapidly from perch to perch among the high trees overhead. It would seem more likely to have been an owl, but my searches failed to produce the bird.

Megalaima franklinii franklinii (Blyth): Goldthroated Barbet.

A male from Japvo weighed 77 gr.

Megalaima asiatica asiatica (Latham): Bluethroated Barbet.

Birds from Phek weighed, ♂ 90, ♀ 87, 88 gr.

INDICATORIDAE

Indicator xanthonotus fulvus Ripley: Eastern Goldenbacked Honeyguide.

A single specimen, the type of this subspecies, was taken near Pfutsero. It agrees with a single specimen from Burma collected by Smythies and reported on in my original description (1951). These birds seem to be found only near wild bees' hives on cliffs, and perch quietly in the tallest trees, so that they are very difficult to observe. The Angami name is 'Mephi Tsu Kelie Para'. Weight: ♂ 29 gr. Wing 90.

PICIDAE

Picumnus innominatus malayorum Hartert: Speckled Piculet.

We found the Speckled Piculet in the scrub oaks and light secondary growth along the trail in the eastern hills from 3,500-4,000 ft. Wing, ♂ 54, 56.5, ♀ 59 mm. Soft parts: iris brown, ocular skin purplish-blue, bill black base of lower mandible gray, feet bluish-gray. Weight: ♂ (2) 11 gr., ♀ 12 gr.

Sasia ochracea reichenowi Hesse: Burmese Rufous Piculet.

A pair were taken at Phek in a thick bamboo clump near the village at 4,800 ft. These belong to the Burmese race of which *querulivox* is a synonym. Weight: (2) 10 gr.

Micropternus brachyurus phaiiceps (Blyth): Northern Rufous Woodpecker.

Found in deciduous secondary scrub forest at altitudes from 1,500-4,000 ft. Weight: ♂ 105, ♀ 92 gr.

Picoïdes darjellensis fumidus (Ripley)¹: Southern Assam Pied Woodpecker.

This is a dark saturated population of the Pied Woodpecker found along the Himalayas in the eastern ranges, and in north Burma. We found these birds only in heavy evergreen forest at 7,000-8,000 ft. My three specimens are somewhat smaller than *darjellensis* from east Nepal and Sikkim, although Burmese birds are equally small. But the dark smoky underparts and darker, more richly-coloured vent patch and nuchal collar, separate this form from its relative to the north and east.

Measurements (mm.):

	Wing	Tail	Culmen
♂ (type)	126.5	83.5	32
2 ♀ ♀	123, 126	76 (2)	31, 32
Weight:	♂ 71, ♀ 61, 63 gr.		

Picoïdes cathpharius pyrrhothorax (Hume): Redbreasted Pied Woodpecker.

A single male with a wing measurement of 95.5 mm. is my only record of this rare form. It was taken by a Naga at 4,700 ft. in scrub jungle near Phesama, a village 6 miles south of Kohima.

Picoïdes hyperythrus hyperythrus (Vigors): Rufousbellied Woodpecker.

The two females from Mt. Zephu weighed 37, 41 gr. These birds were taken from 7,000-7,500 ft. in thick evergreen. They have a characteristic rattling call, reminiscent of the genus as a whole. In these specimens the lores seem somewhat more spotted and the tips of the third outermost rectrices more stained with orange-brown (tobacco juice color), than in comparable specimens from the Himalayas. There is no size difference, nor are other more striking characters discernible.

Picoïdes macei macei (Vieillot): Fulvousbreasted Pied Woodpecker.

Specimens were taken at Chakabama 13 miles east of Kohima at 3,000 ft. Males weighed from 43-48 gr., and females from 38-44 gr. The birds were in light deciduous scrub near cultivation. In fact

¹ Delacour (*Auk*, 68, 1951, p. 50), points out that *Picoïdes* Lacépède should replace *Dendrocopos* Koch.

from suitable altitudes of 1,500-3,000 ft., this bird in Manipur and the Naga Hills can be a bird of cultivated areas in hedgerows and occasional high trees about houses. Hume (1888) refers to this species and says that his Manipur birds are more streaked below than typical *macei*, and this statement is referred to by Ticehurst (1939) as a reason for combining the species *macei* and *atratus*. I cannot agree that *macei* from Manipur are significantly larger or more streaked, and with the present very uncertain evidence about the occurrence of the two forms in east Manipur, I am inclined to keep *macei* and *atratus* as separate species.

Picoides canicapillus canicapillus (Blyth): Burmese Pigmy Woodpecker.

A pair was collected in scrub oaks at 3,000 ft. in the eastern hills. They seem to be pure *canicapillus*. The female has spotted central rectrices, the male unspotted. Wing ♂ 91, ♀ 94 mm. Weight, (2) 24 gr. Soft parts: iris ♂ white, ♀ gray; bill ♂ dark grayish-horn, ♀ grayish-horn; feet ♂ blackish-green, ♀ blackish gray-green.

Blythipicus pyrrhotis pyrrhotis (Hodgson): Banded Bay Woodpecker.

A female from Phesama weighed 140 gr. and had a wing measurement of 142.5 mm.

EURYLAIMIDAE

Psarisomus dalhousiae dalhousiae (Jameson): Longtailed Broadbill.

This seems to be a fairly common bird around Kohima and little boys offered us several for sale at fanciful prices that had been trapped with bird lime. A female shot near Phek weighed 67 gr.

Serilophus lunatus rubropygius (Hodgson): Hodgson's Broadbill.

Two females taken at Phek in thick scrub weighed 33, 35 gr.

HIRUNDINIDAE

Hirundo striolata substriolata Hume: Striated Swallow.

A female from east of Kohima taken while dipping over a stream at about 2,000 ft. seems to belong to this race, *vide* Mayr (1941). It has a wing of 120, tail 83 mm. and lacks a thigh patch. Weight 22 gr.

MOTACILLIDAE

Motacilla alba alboides Hodgson: Hodgson's Pied Wagtail.

The commonest of the many migrant wagtails skittering about the main roads running through the Naga Hills. Two males weighed 23, 25 gr.

The Yellow-headed Wagtail (*citreola*) was also observed in marshy places but collected only in Manipur.

Anthus hodgsoni hodgsoni Richmond: Hodgson's Tree-pipit.

A single bird was taken at 7,500 ft. on Mt. Zephu in an open scrub area near Zephu village. Weight 20 gr.

Anthus hodgsoni yunnanensis Uchida and Kuroda: Northern Tree-pipit.

Taken from 4,700-7,000 ft.; three specimens weighed from 21-22 gr.

CAMPEPHAGIDAE

Pericrocotus flammeus elegans (McClelland): Scarlet Minivet.

The races of this species have been monographed by Deignan (1946). I hope that authors will agree with my suggestion (1948) that the type locality of this form should be re-restricted to Shillong in the Khasia Hills. Specimens of this variable form collected by us in the Naga Hills agree with Deignan's diagnosis in size (wing ♂♂ 97-99, ♀ 98.5 mm.), but show a variation from narrowly to broadly margined with red on the outer web of the central rectrices, and in the case of the single female obtained, a small spot of colour has appeared on the outer web of the third primary. Males weighed from 28-30 gr. and the female 29 gr. The birds were in small flocks in open deciduous forest from 2,000-4,700 ft.

Pericrocotus brevirostris (Vigors): Shortbilled Minivet.

Shortbilled Minivets were collected at different altitudes from 2,500-4,500 ft. in open deciduous forest, and along the edges of ever-green patches. Two pairs having wing measurements of, ♂ 87.5, 88, ♀ 88.5, 89.5 mm. These birds all lack a coloured margin along the outer edges of the inner secondaries and have reduced black areas or yellow tips on the second innermost pair of tail feathers, agreeing with Mayr's admirable diagnosis of these sibling species (1940). Males and females vary from 16 to 17.5 gr.

Pericrocotus ethologus mariae n. subsp.

Type.—No. 12,685, Yale Peabody Museum, ♀ adult, Phek, eastern Naga Hills, Assam, December 6, 1950; S. Dillon Ripley, collector.

Compared to *laetus* Mayr, the adult female is deeper and more pure gray on the upper parts lacking the olive-green wash, the rump and upper tail coverts somewhat richer, more orange-yellow. Below there is a rich, strong orange-yellow wash particularly on the lower throat, but on the upper throat as well, breast, and abdomen. The adult male is, if anything, slightly deeper red than in *laetus*. This a smaller form also.

Compared to *ethologus*, this race is altogether smaller and far more richly coloured in the female, the back gray rather than greenish. Compared to *cryptus* Mayr, these females have a richer orange-yellow suffusion below, reaching the cheeks in one specimen. In addition they have a broader band of orange rather than yellow on the forehead. The male of *mariae* also is more richly scarlet, less orange-red than males of *cryptus*. Compared to *annamensis* these females are less golden below, more orange-yellow. Above they are paler, both in the gray tone of the back and in the orange-yellow of the rump. In fact in tone of colour, *mariae* seems almost exactly intermediate between *cryptus* of east Burma and Siam, and *annamensis* of Indo-

China. This is particularly interesting in view of the decided separation between *mariae* and the two eastern subspecies.

Measurements (mm.):	Wing	Tail	Red on tail	Wing-tail ratio
♂	88	100	28.5	113%
			(spot present)	
2 ♀ ♀	85, 86.5	99.5, 104		117, 120% ¹

Much to my surprise the three specimens of *Pericroctus ethologus* collected by my wife and myself in the Naga Hills and the hills of northern Manipur adjacent to the Naga Hills (Kangpokpi), when compared with *laetus* proved to be far more richly coloured than that form whose distribution as given by Mayr (loc. cit.) is 'Sikkim, Bengal, Cachar, and Assam'. It gives me great pleasure to name this new form for my wife.

Range: Naga Hills in Assam and northern Manipur.

Pericroctus solaris solaris Blyth: Graythroated Minivet.

A pair were taken in the eastern Naga Hills at 6,000 and 8,200 ft. in evergreen forest. Both specimens weighed 15 gr.

Pericroctus roseus roseus (Vieillot): Roseate Minivet.

A wanderer at this season, found by us at 3,500 ft. in the lower hills. Weight 16 gr.

Hemipus picatus capitalis (McClelland): Brownbacked Shrike.

Found from 2,000-5,000 ft., in light scrub or open deciduous forest in small flocks in the tops of small trees. Their tit-like insistent 'chip' calls immediately attract attention. Males and females weigh from 8.5-9.5 gr.

Tephrodornis gularis pelvica (Hodgson): Wood-shrike.

A female taken in open deciduous scrub at 3,500 ft. on the Meluri road weighed 46 gr.

Coracina fimbriata melaschista (Hodgson): Dark Gray Cuckoo-shrike.

A male taken at 2,500 ft. among a flock of minivets in a large open tree near the Tizu River weighed 41 gr.

AEGITHINIDAE

Chloropsis hardwickii hardwickii Jardine & Selby: Orangebellied Chloropsis.

A common bird from 4,000 to over 8,000 ft. primarily in light fig and other open trees of secondary scrub or remaining deciduous forest. A prominent member of the hunting party associations. Some males were in subadult dress, November and December. Weights ranged from—♂♂ 32-40, ♀♀ 25-34 gr.

¹ Mayr (loc. cit.) gives a wing-tail ratio for *cryptus* of 104.4-114%.

PYCNONOTIDAE

Spizixos canifrons Blyth: Finchbilled Bulbul.

The Finchbilled Bulbul is not uncommon but shy, and although we saw it numerous times from Kohima at 4,700 ft. up into the higher hills, one or more of the birds always seemed to be just dashing over onto the other side of some thick bushes in the open scrub pastures where it mostly lives, and we could never quite collect a specimen. I did, however, shoot one out of a tall tree in thick evergreen on the slopes of Mt. Zephu at 6,800 ft. Weight 44 gr. Wing 102.5 mm.

Pycnonotus flaviventris flaviventris (Tickell): Blackcrested Yellow Bulbul.

A bird of open scrub and secondary growth from 3,500-5,000 ft. I was much surprised one day when sitting on the summit of Mt. Zephu to see a group of these birds working through an open scar in the jungle where evidently lightning or a small forest fire had burned off some of the original heavy evergreen forest. As I watched the flock moved on up and over the crest of the mountain, flying high over the jungle. Two males weighed 30, 34 gr.

Pycnonotus jocosus monticola (McClelland): Redwhiskered Bulbul.

The races of this species (*Otocompsa emeria* of the Fauna) have recently been revised by Deignan (1948). The darker form of Sikkim, Bhutan, and Assam, and farther east must now be known as *monticola*. Two females of this common bird of open scrub country near villages, were collected at 3,500 and 3,750 ft. They weighed 34, 36 gr.

Pycnonotus cafer stanfordi Deignan: Burmese Redvented Bulbul.

The common Redvented Bulbul of the Naga Hills about Kohima appears to belong to the northern Burmese race as defined by Deignan (1949) in a revision of this species. Presumably *stanfordi* ranges from the Naga Hills north along the Patkoi Range and south through Manipur to the Chin Hills. A male from Kohima weighed 47 gr.

Pycnonotus striatus arctus Ripley: Eastern Striated Green Bulbul.

Striated Green Bulbuls from the Naga Hills are dark with the blackish edgings to the feathers of the crest and shading on the tail and breast which prompted me to describe *arctus* from the Mishmi Hills. They are similar in size to Nepal birds, however. Four males and a female measure—wing ♂ 105-111, ♀ 105 mm.; culmen ♂ 18-19.5, ♀ 18 mm.

We found these birds in evergreen or on the edges of evergreen forest from 5,200-8,200 feet. Weight: ♂ 52-58, ♀ 53 gr.

Pycnonotus flavescens flavescens Blyth: Blyth's Bulbul.

Males and females were collected from 3,750-4,000 ft. We found this bulbul in small groups in thick bushes in pasture or cut-over scrub near villages. When alarmed they have a harsh churring note like a laughing thrush. But they also possess a sweet pycnonotine



View on Mt. Japvo (7,700 ft.) showing the shrubby undergrowth where we found *Pnoepyga*, *Spelaeornis*, and *Tesia* as well as *Garrulax austeni*.



Photos

Summit of Mt. Japvo (9,890 ft.).

Author



Upper Phozami village from the lower slopes of Mt. Zephu. Note crossbow, still used for bird hunting.



Photos

Author

Mt. Zephu (8,400 ft.) in Sangtam Naga country. This mountain is a northward extension of ridge of Mt. Mol Lan on Burma border, and lies perhaps six miles west of the estimated border itself.

song of two bold notes followed by a short trilling run. They are alert and somewhat shy and will not tolerate too close an approach.

Microscelis flavala flavala (Hodgson): Browneared Bulbul.

The Browneared Bulbul was fairly common around cultivated areas as was the preceding species, from 2,500-4,700 ft. Weight: ♂ 29-38, ♀ 29 gr.

Microscelis madagascariensis nigrescens (Baker): Assam Black Bulbul.

A common noisy species, found from low-lying areas up to 8,000 ft. or more, wandering erratically in flocks throughout the winter months. We found considerable variation in weight in these birds, in apparent adults from 53-64 gr.

Microscelis maclellandi maclellandi (Horsfield): Rufousbellied Bulbul.

Found in light deciduous forest from 3,000-8,200 ft., sometimes associated in mixed hunting parties. Weight 42-48 gr.

CINCLIDAE

Cinculus pallasii, the Brown Dipper, was seen along the Tizu River at 2,500 ft., but not collected.

MUSCICAPIDAE

Subfamily TURDINAE

Erithacus calliope calliope (Pallas): Rubythroat.

A male of this migrant was taken at Phek. Weight 23 gr.

Erithacus chrysaeus chrysaeus (Hodgson): Golden Bush-robin.

On Mt. Japvo at 9,250 ft., November 7, a loud wren-like 'chick' noise in low ferns and strobilanthes near the ground in evergreen forest, prompted me to stalk and collect a single specimen of the Bush-robin, the only one we found, and possibly a migrant from the hills north of the Brahmaputra. It appeared to be a young male, but is in female plumage. Weight 14 gr.

Erithacus indicus indicus (Vieillot): Whitebrowed Bush-robin.

A single bird was taken in a thicket at 8,200 ft. on Mt. Japvo. Weight 14.5 gr.

Erithacus cyanurus rufilatus (Hodgson): Redflanked Bush-robin.

Common on Mts. Zephu and Japvo in the evergreen under-story. Five females weighed from 12-14 gr., a single adult male 14 gr., and a subadult male just beginning to assume some of the blue adult plumage, 15.5 gr.

Phoenicurus hodgsoni (Horsfield & Moore): Hodgson's Redstart.

A female was taken along the Meluri trail in scrub pasture. Weight 18.5 gr.

Phoenicurus frontalis frontalis Vigors: Bluefronted Redstart.

Wintering birds were collected from 4,800-9,890 ft. in open pasture and scrub land. Weight: ♂ 15, ♀ (3) 17 gr.

Myiomela leucura leucura (Hodgson): Whitetailed Blue Robin.

A female was taken in thick scrub jungle at Phek, 4,900 ft. Weight 26 gr.

Enicurus maculatus guttatus Gould: Eastern Spotted Forktail.

The Spotted was the only forktail encountered by us. A male was shot on the Meluri trail at 2,500 ft. in a damp spot in heavy evergreen jungle. It had a loud harsh alarm note 'tseek,' rather like a Whistling Thrush. Weight 39 gr.

Saxicola torquata przewalskii (Pleske): Turkestan Bush-chat.

Not uncommon in patches of pasture land up to nearly 5,000 ft. Weight 14.5-16 gr.

Saxicola torquata stejnegeri (Parrot): Japanese Bush-chat.

In similar localities to the above. Slightly paler and with a stouter bill. Weight ♂ subadult 14.5 gr.

Saxicola ferrea Gray: Dark Gray Bush-chat.

Common in pasture land from 4,900-6,000 ft. Three males weighed 15.5-16 gr., a female 15 gr.

Monticola rufiventris (Jardine & Selby): Rufousbellied Rock-thrush.

This rock-thrush was the only one we found in the Naga Hills. It seemed to prefer clearing edges from 4,000 to 7,000 ft. A pair were active in very high pines at Meluri in the evening, flying from tree to tree making a harsh rasping indrawn rattle 'ahhhrrr,' interspersed occasionally with a high shrill 'tick,' the two sounds spaced far apart, unrelated. The birds perched facing along the big branches rather than crosswise, and carried their tails high and cocked. Weight: ♂ 56, 59; ♀ 48, 56 gr.

Zoothera dixonii (Seeborn): Longtailed Plainbacked Mountain Thrush.

Three of these shy thrushes were collected by us above 7,700 ft., in evergreen forest on Japvo and Zephu. They fly up from a trail quite silently to a perch in a tree and sit very still hoping to be unobserved. The colour of the feet of this species varied from 'flesh' to 'dull yellow'. Wing: ♂ 139, 148.5, ♀ 135 mm. Weight: ♂ 98, 103, ♀ 97 gr. One male had enlarged gonads in mid-November.

Zoothera dauma dauma (Latham): Smallbilled Mountain Thrush.

A bird of the year, a male, taken on Mt. Zephu at 8,200 ft. weighed 130 gr.

Turdus dissimilis Blyth: Blackbreasted Thrush.

A male in subadult plumage from Phek weighed 75 gr.

Turdus obscurus Gmelin: Dark Thrush.

Nine males and eight females of this common migrant were taken by us from 2,500 ft. up. Males weighed from 65 to 80, and females from 59 to 75 gr.

Subfamily TIMALIINAE

Pellorneum ruficeps chamelum Deignan: Cachar Spotted Babbler.

A trio of this subspecies described by Deignan (1947) from Cachar prove that this form extends west-east from the Garo Hills to the eastern Naga Hills east of Kohima. These birds from Phek and the trail farther east were shot in thick scrub jungle at 4,800 ft. and differ slightly in the colour of the bill; ♂ 'upper mandible black, lower basally yellow, distally gray, ♀ upper mandible basally black, distally grayish-horn, lower basally yellow, distally gray. They weighed: ♂ 31, ♀ 26.5-28 gr.

Pellorneum albiventre nagaensis (Godwin-Austen): Naga Brown Babbler.

Two males from Phek and Meluri were taken in very heavy cut-over scrub, wood-lot areas near villages. They measure—wing 58.5, 59; tail 59, 57 mm.; wing-tail index 96, 100.5%. Weight 21, 22 gr.

Pomatorhinus ruficollis bakeri Harington: Baker's Rufousnecked Scimitar Babbler.

Adults and one subadult (late October) were taken from 4,700-6,000 ft. These scimitar babblers like to work through heaps of fallen vegetation, thickets in scrub pasture and brush piles, calling occasionally, a harsh rattling grating call that sounds rather like *Pomatorhinus erythrogeus*, the Rustycheeked Scimitar Babbler. Sometimes they make a grating mewling sound, rather like what one fancies a small bird would utter caught in the talons of a hawk. Two adult males weighed 31, 32, an adult female 29, and a subadult female 27 gr.

Pomatorhinus erythrogeus maclellandi Godwin-Austen: McClelland's Scimitar Babbler.

A noisy babbler found by us in thick scrub under 5,000 ft. Males weighed 57, 58, and females 47, 54 gr. Soft parts: iris yellowish-cream, creamy white; bill upper mandible blackish or dark brown basally, distally grayish-brown, lower grayish or whitish brown, base of lower mandible yellow; feet brown to grayish brown; ocular skin dark purplish-blue.

Pomatorhinus ochraceiceps austeni Hume: Hume's Scimitar Babbler.

A single female taken on the trail to Yisi at 2,000 ft. on a steep slope in mixed deciduous-evergreen forest is our only specimen of this little-known form. Soft parts: iris dull pinkish-cream; bill orange coral; feet dull greenish brown. Weight 34 gr.

Pnoepyga albiventer albiventer (Hodgson): Scalybreasted Wren Babbler.

In the solid ground cover of ferns, strobilanthes and nettles that grew waist-high on Mt. Japvo under the evergreen forest canopy at 7,000 to 9,000 ft., Wren Babblers and Wren Warblers were numerous. The Scalybreasted Wren Babbler was apparently fairly common although its quiet skulking habits made it difficult indeed to see. It has a single alarm note, an explosive 'chick,' uttered sometimes within a foot or two of the quiet stalker. Three males weighed from 21-23, a presumed female (fulvous below and sexed as a male ?), 22 gr.

Pnoepyga pusilla pusilla Hodgson: Brown Wren Babbler.

The Brown Wren Babbler seems to occur from 3,500 ft. up in the Naga Hills. We took it at all altitudes in similar biotope to the preceding species. Except for the difference in size, the two species seem identical in habits and requirements, although presumably they replace each other to some extent altitudinally, *albiventer* living higher up but with a wide margin of overlap. The only call I heard, the alarm note 'chick,' seemed similar to the other species.

Weight: ♂ 11, 12, ♀ 11 gr.

Spelaeornis chocolatinus nagaensis Ripley: Naga Wren Babbler.

These delicate little Wren Babblers were very common on the slopes of Mt. Japvo above 7,000 ft., feeding evidently among one of the low strobilanthes which was in flower and had attracted many insects. The only call I could with certainty ascribe to this species was a low chuckling warning note. However, I heard several times a very loud explosive, melodic whistle 'wheeeuw,' and once in the gloaming saw a tiny wren-like figure scuttling over the moss-covered rocks where the call had just come from. From the fact that it seemed to have a tail I presumed that it was this Wren Babbler. As I pointed out in my original description (1951) there seems to be sexual dimorphism in this form, females being much more rufescent on the underparts than males, in this character perhaps resembling *chocolatinus chocolatinus*. The two specimens of the latter which I have seen in the British Museum are very rufescent. As both specimens are unsexed, they may perhaps both be females?

Weight: ♂ 10.5-14.5, ♀ 14 gr.

Measurements: wing 48-52.5, tail 41-44, culmen 12.5-14 mm.

When I reviewed this genus (1950), I unfortunately overlooked an important note by Ticehurst (1939) on the identity of *Elachura haplnota*. This species was listed by Delacour (1947) in his revision of the babblers as a member of the genus, *Spelaeornis*, as he too had apparently missed Ticehurst's note. Ticehurst (loc. cit.), having compared the unique specimen of *haplnota* from North Cachar with a specimen of *Spelaeornis chocolatinus* from the 'Naga Hills' in the British Museum collected by Godwin-Austen, declared that the two represented the same species, the type of *haplnota* differing only by being fulvous-white on the throat, and less rufescent on the breast and sides of the body.



Spelæornis chocolatinus nagaensis Ripley.

Thus the difficult situation with respect to listing the species of this obscure genus becomes more pronounced. In my original review of *Spelaeornis* (loc. cit.), I listed the following species: (a) *formosus*, from the hills north of the Brahmaputra, and Fukien; (b) *haplonotus*, known from a single specimen from north Cachar; (c) *troglodytoides*, a well-marked species with several subspecies from north-eastern Bhutan, north and east into Kansu and Shensi, west China; (d) *caudatus*, known from the hills north of the Brahmaputra; (e) *badeigularis*, known from a single specimen from the Mishmi Hills; (f) *longicaudatus*, from the Khasia Hills south of the Brahmaputra east to north Cachar and south to Kedimai, Manipur, a locality from which a single specimen exists which I have examined, and (g) *chocolatinus*, a species with several subspecies ranging from Manipur south to the Chin Hills and north-east into the Shan States, Yunnan, and, somewhat isolated, one population in north Tonkin. To this last species I have now added the subspecies *nagaensis* from the Naga Hills north of Manipur, which differs from typical *chocolatinus* by being much more olivaceous-brown, less rufous above, and with distinctly grayish-brown rather than rufous-brown lores, cheeks and sides of the head. The underparts also are far less rufous.

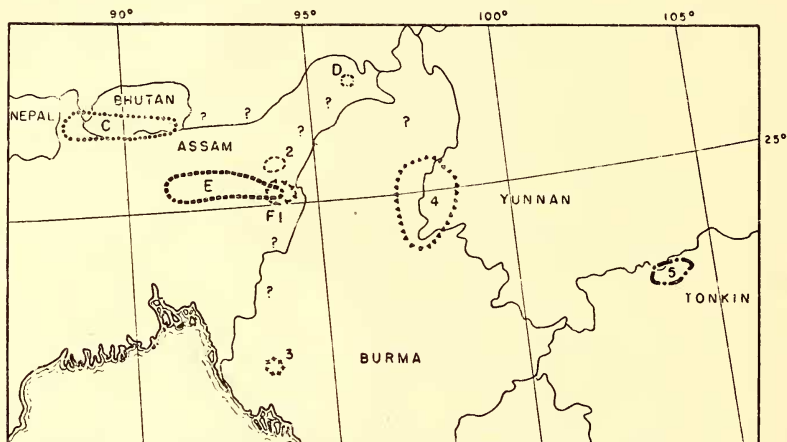
The situation is now complicated by the fact that *haplonotus* is shown to be a synonym of *chocolatinus*. This eliminates one of the species from my list, and further demonstrates that the two species, *longicaudatus* and *chocolatinus*, have overlapping ranges in north Cachar, and the western side of the northern Manipur Hills. This extends the range of *chocolatinus* west for 40 miles in an airline into the range of *longicaudatus*.

In addition the specimen of *chocolatinus* in the British Museum from the 'Naga Hills' poses another problem. This specimen was unfortunately not seen by me during my visit to London, but it seems inconceivable that two forms as close in size and general pattern as *chocolatinus* and *nagaensis* can coexist in the Naga Hills. I prefer to think that the political boundaries of the area in the 1870's when the collection of Godwin-Austen was made account for the slip, as there is no more detailed locality on the label than: 'Naga Hills—Date-winter. Cat. No. 482.'

Sir Norman Kinnear has said that the records of collections from which this may have come, those made by Ogle and Chennell in the winter of 1875-76, are untraceable. I presume, therefore, until further evidence is forthcoming that the 'Naga Hills' referred to on the label of this specimen of *chocolatinus* are on the Manipur side where there are many Naga tribes, and that *chocolatinus chocolatinus* occurs in what is now known politically as Manipur, and west into north Cachar (Hangrum, type locality of *haplonotus*, a village some 17 miles east of Haflong), while *chocolatinus nagaensis* occurs in the Naga Hills proper in the Kohima area, from the Barail Range (Mt. Japvo) on the west, east to Pfutsero at least.

More recently M. Delacour (1951) in a discussion of the birds of Indo-China, has referred to my revision of *Spelaeornis* and cast doubt on the question of the distinctness of the species enumerated by me. He would prefer to list them all as subspecies of each other, presuming that they replace each other geographically, and are otherwise

closely related. Unfortunately he overlooked the fact that I had examined the specimens concerned and had found that in one case two of the forms were sympatric. Until more is known of the distribution of these elusive and perplexing birds, I would still prefer, therefore, to take the less conservative view and list the following closely related species illustrated on the map. (I exclude species (a) *formosus*, and (b) *troglodytoides*, which are distinct enough not to enter into the discussion.)



The species of my list then are (c) *caudatus* (range farther east unknown), (d) *badeigularis* (range, except in one area of the Mishmi Hills, unknown), (e) *longicaudatus* (partially sympatric with the next), (f) *chocolatinus* with five subspecies, the ranges of which are still not worked out; (1) *chocolatinus*, (2) *nagaensis*, (3) *oatesi*, (4) *reptatus*, (5) *kinneari*.

***Stachyris ruficeps ruficeps* (Blyth): Redheaded Babbler.**

A few specimens of this rather shy little babbler were collected from 4,900-7,700 ft. in heavy evergreen forest or cut-over scrub, but always the birds were in dense undergrowth. Soft parts: iris red; bill upper mandible blackish or brownish-horn, lower basally purple, distally gray, or, pearly horn to pinkish horn; feet variously brownish green, brownish yellow, greenish brown or yellowish gray! In fact there seemed to be just such variation in the colour of the feet. Weight: ♂♂ 10-12, ♀ 9.5 gr.

***Stachyris chrysaea chrysaea* Blyth: Goldenheaded Babbler.**

Three males taken from 4,000-7,000 ft. are our only record of this species. Weight 8.5-10 gr.

***Stachyris nigriceps coltarti* Harington: Blackthroated Babbler.**

Three males of this species were taken in thick scrub jungle from 4,800-4,900 ft. Weight 16-17 gr.

Timalia pileata bengalensis Godwin-Austen: Redcapped Babbler.

A male and female from 2,500 and 4,500 ft. taken in open pasture scrub weighed: ♂ 17, ♀ 15 gr.

Paradoxornis poliotis poliotis (Blyth): Blyth's Suthora.

A series of these tiny buzzing creatures was taken on Mt. Zephu at over 8,000 ft. A few others were taken near Phek at over 6,000 ft. They were as always difficult to see and collect, streaming through the low bamboos under the heavy evergreen overstory, in large flocks, continually in motion. Weight 5-6.5 gr.

Paradoxornis ruficeps bakeri (Hartert): Baker's Parrot-bill.

A relatively common bird along the trail east of Phek from 2,500 to just under 4,000 ft. These rather slow-moving and unsuspicious parrot-bills frequented the pastures and edges of bamboo scrub, feeding on ripening weed seeds, some cultivated millet, and insects. Their call is very characteristic, a squirrel-like chitter interrupted with a series of rather slowly pronounced double notes, 'tee-ur'. Soft parts: iris brown, reddish-brown; ocular skin blue; bill upper mandible dark brownish or blackish horn, lower mandible and tomia grayish horn; feet bluish-gray. Weight: ♂♂ 35-38, ♀ 33, 35 (♀?) 40 gr.

Measurements: wing ♂♂ 86-90.5, ♀ 84.5 (2), (♀?) 90 mm. These birds seem slightly smaller than the measurements given by Baker (1922), but in colour they are mostly similar, although it is worth noting that there is very considerable variation in the shade of colour of the red of the head and the olive-brown of the upper-parts.

Paradoxornis flavirostris guttaticollis David: Austen's Parrot-bill.

A single female was shot at 3,500 ft. along the trail near Primi in a millet field. It was one of a flock of four birds associated with *Garrulax ruficollis*. The birds were at least partly feeding on the ripe millet. They made soft 'tee-ur' calls. Iris brown, bill yellow, feet bluish-gray. Weight 26.5 gr. Wing 80 mm.

Garrulax pectoralis uropygialis Bonaparte: Blackgorgetted Laughing-thrush.

This is a variable population as Sálím Ali and I had pointed out in the Mishmi Hills paper (1948). Specimens irrespective of sex have black ear coverts, or black with occasional streaks of white, or nearly all white ear coverts. There is variation also in the amount of rufous shading on the upper- or underparts. Wing: ♂♂ 130, 134; ♀♀ 130-150 mm. Weight ♀ (2) 135 gr.

We met these laughing-thrushes in small flocks near the outskirts of villages in deciduous second growth, occasionally turning over the heavy fall of oak and other leaves on the ground. When disturbed they would fly off in low dipping flights and work away from the hunter skilfully putting trees between themselves and him.

They had harsh churring conversational calls back and forth within the flock.

Garrulax leucolophus patkaicus Reichenow : Whiteheaded Laughing-thrush.

The Whiteheaded Laughing-thrush was an easily noted bird from 2,500 to nearly 5,000 ft. Males and females weighed from 104-130 gr. They frequented deciduous scrub, usually near villages. Moulting specimens were taken into late November. This name antedates *hardwickii* Ticehurst.

Garrulax galbanus Godwin-Austen : Austen's Laughing-thrush.

This striking looking laughing-thrush with a black face and chin and yellow underparts, was taken by us along the Meluri trail at 3,000 ft. as well as in Manipur. It provides the first record for the species in the Naga Hills. The birds were in tall grass and cut-over scrub. Soft parts: iris pinkish brown, reddish brown; ocular skin blue; bill black; feet blackish gray. Weight: ♂ 56, 57, ♀ 55 gr.

Garrulax gularis gularis (McClelland): McClelland's Laughing-thrush.

I came on a small flock of this most inconspicuous species, busily scratching in the leaves in a most impenetrable tangle of undergrowth near the trail beyond Meluri at 3,000 ft. They made occasional low harsh typical laughing-thrush churring noises, indistinguishable to me from those of others of the genus. I was able to obtain one male before the flock characteristically vanished. Soft parts: iris reddish brown; bill black; feet yellowish orange. Weight: 92 gr.

The resemblance between this form and *delesserti* is most striking. Proportions, size, and colour pattern are all similar. The south Indian bird has had all the yellow and olive tones washed right out of the plumage as if in life it were simply badly faded and foxed.

Garrulax cineraceus cineraceus (Godwin-Austen): Ashy Laughing-thrush.

The Ashy Laughing-thrush was found near villages in thick scrub from 4,200 ft. up to 5,000 ft. It is a shy skulker like all the others although once I came on a party on a village path busily turning over heaps of buffalo dung evidently looking for insects.

Soft parts: iris varied from creamy yellow to pinkish cream; bill, upper mandible brownish horn, lower, yellowish or whitish horn; feet pale brownish flesh. Weight: 47-51 gr.

Garrulax rufogularis assamensis (Hartert): Rufouschinned Laughing-thrush.

This laughing-thrush was taken in exactly the same biotope as the preceding species, but to us seemed less common. We obtained only a pair, at 4,300 and 4,900 ft. near villages in thick cut-over scrub. Wing: ♂ 94.5, ♀ 92 mm. The female lacks a complete

black cap and is more rufescent below, and so is presumably sub-adult. Weight: ♂ 67, ♀ 64 gr. This subspecies is a somewhat more saturated form than the typical one, but seems not to be smaller as described by Hartert (1909).

Garrulax caerulatus livingstoni n. subsp.

Type.—No. 12,961, Yale Peabody Museum, ♂ adult, Mt. Japvo, Naga Hills, Assam, November 6, 1950; S. Dillon Ripley, collector.

This specimen has been kindly compared with the type and one other specimen of *subcaerulatus* from the Khasia Hills in the British Museum Collection by Mr. J. D. Macdonald, who has written me about the matter. Compared to that form it lacks the whitish ear coverts, tipped with black, the paler upperparts, and the broad white tipping of the three outermost pairs of tail feathers.

Compared to *caerulatus*, this form has the forehead more distinctly blackish, the feathers of the crown rufous-brown, darker than in the nominate form and more broadly edged with black, and the upper parts richer, more saturated with rufous. Mr. Macdonald concludes of this form (in litt.), 'I would say that it is quite clearly distinct from both races, but probably more closely allied to the nominate race'. As specimens of *subcaerulatus* were lacking in this country, and I could not match my bird with *caerulatus*, I am most grateful to Mr. Macdonald for confirming my feeling that this specimen could hardly represent *subcaerulatus* as described (Baker, 1922, p.142.) Compared with *kaurensis* this form has the ear coverts white tipped with blackish-rufous.

Two birds were collected on Mt. Japvo at 7,700 ft. but unfortunately one was too badly damaged to be saved and the species was not seen again. Soft parts: iris brown; ocular skin dark blue; bill black; feet pale bluish-white. Weight 98 gr. Wing 118; tail 125, culmen 24. Range: known only from Mt. Japvo, Naga Hills.

This subspecies is named for my late friend and father-in-law, the noted sportsman, Gerald M. Livingston.

Soft parts: iris brown; ocular skin dark blue; bill black; feet pale bluish-white. Weight: 98 gr.

Garrulax ruficollis (Jardine & Selby): Rufousnecked Laughing-thrush.

This is a lower altitude species than the Ashy or the Rufous-chinned, but may be seen in the same habitat from 2,500 ft. up to nearly 5,000 ft. on occasion. We found them once in a millet field when the seed was ripe, otherwise in hedgerows and scrub pasture working through the thickets with constant churring calls among the flock. They also utter a three-noted mellow whistle the first note of which is reedy, as if the reed were broken. Weight: 60-67 gr.

Garrulax sannio albo-superciliaris Godwin-Austen: Whitebrowed Laughing-thrush.

Another species of pasture and cut-over scrub land, frequenting thick bushes between 3,500 and 5,000 ft. Two males weighed 68, a female 56 gr. Deignan (in litt.) distinguishes several forms of this species, of which this one has a continuous white supercilium and brown ear coverts.

Garrulax austeni austeni (Godwin-Austen): Cachar Laughing-thrush.

We found this dark brown inconspicuous laughing-thrush only in the evergreen forest on Japvo from 7,700 to 8,850 ft. It frequented dense tangles of brush where large forest trees had fallen, or the thicker undergrowth under the main canopy. A male taken in thick brush with a small flock of the species was calling on November 11th, in a very reminiscent way to that of the Spotted Babbler (*Pellorneum ruficeps*), a liquid three-note whistle, 'to meet you' as that call has been rendered, but much louder. The flock also called back and forth with loud harsh calls like a wounded tree-pie. At other times when working in the underbrush they would make a soft 'tick' like wren. Four males have wings from 90-100, a female 90 mm. Soft parts: iris brown—once, pale whitish-brown, once clay brown; bill black; feet brown. Weight: ♂♂ 63-74, ♀ 59 gr.

Garrulax erythrocephalum godwini (Harington): Redheaded Laughing-thrush.

The commonest laughing-thrush of high evergreen forest, found by us from 5,250-9,200 ft. Travelling in flocks they exchange a constant series of low twitters and chuckles as they hop and flirt through the low bushes, on the ground, or, occasionally among the gnarled and twisted trunks of stunted oaks and rhododendrons. One male had enlarged gonads in early November, although no females showed similar signs. One female had small intestinal worms. A female was in heavy wing moult November 12th.

Soft parts: iris dark grayish brown, dark brownish gray (5 ♀ ♀); bill blackish brown; feet fleshy brown.

Wing: ♂♂ 97-102.5; ♀♀ 93-106.5 mm. Weight: ♂♂ 74-92 gr.

Garrulax phoeniceum bakeri (Hartert): Crimsonwinged Laughing-thrush.

A subadult male was taken below Kohima October 15th, which could not have been long out of the nest. It weighed 48 gr. An adult male taken farther to the east at 6,000 ft. weighed 45 gr.

Leiothrix argenteauris vernayi (Mayr & Greenway): Silvereared Mesia.

Synonym: *Leiothrix argenteauris gertrudis* Ripley (1948).

Examination of the series collected in the Naga Hills over to the Chindwin River of Burma, and on to the Shan States, northern Thailand, and southern Yunnan shows that they should all be combined under the name *vernayi*. My Naga specimens link *vernayi* and *gertrudis* in measurements (wing ♂♂ 71.5-76 mm.), and I can find no colour differences in the areas enumerated above which seem constant.

These birds were found in mixed deciduous and evergreen jungle from 3,900-4,800 ft. Weight: ♂♂ 24.5-26, ♀♀ 22-24.5 gr.

Cutia nipalensis nipalensis Hodgson: Nepal Cutia.

A male from the evergreen forest on Mt. Zephu belongs to this form. Wing 98 mm. Weight 56 gr.

Pteruthius rufiventer rufiventer Blyth: Rufousbellied Shrike-Babbler.

A silent species found by us in small flocks in the mid-level of trees in evergreen forest on Mts. Japvo and Zephu from 7,700-8,200 ft. One of the birds struck me as looking like Hodgson's Broadbill when I first saw it, both in its superficial appearance, and in its rather lethargic behavior.

Weight: ♂♂ 46-48, ♀♀ 41.5, 44 gr. Soft parts: iris bluish gray; bill upper mandible black, lower pearl gray; feet brown to brownish-whitish.

Pteruthius erythropterus erythropterus (Vigors): Redwinged Shrike-Babbler.

Fairly Common in evergreen forest from 4,800-6,800 ft. Recently Koelz (1951) has described a new race *validirostris* from Kohima differing from *erythropterus* of the Himalayas and the Chin Hills, 'in having a darker gray on back and smaller white tips to the primaries in the males; in having a clearer gray on crown and very distinct postocular stripe in females; and in having a much stouter bill in either sex'. My series of three males and two females do not bear this out. A female from Nepal in our collection has, if anything, a stouter bill than the Naga females. The tendency to a postocular stripe in females seems to be a variable feature appearing or disappearing throughout the range. Again, the bill of the males and the colouration of the back and the size of the terminal white tips is variable, and disappears as a character in a large comparative series. There is no difference in size in the range of the nominate form. It is difficult for me, therefore, to credit this proposed form.

Weight: ♂♂ 36, 38, ♀♀ 37, 38 gr.

Pteruthius melanotis melanotis Hodgson: Chestnutthroated Shrike-Babbler.

Two males and a female were shot between 6,000 and 7,700 ft. in evergreen forest, well up in the trees, moving in mixed flocks of babblers and warblers. Weight: ♂♂ 11.5, 14.5, ♀ 14 gr.

Gampsorhynchus rufulus rufulus Blyth: Whiteheaded Shrike-Babbler.

In contrast to Stanford (1941), I have always seen these birds with scimitar-babblers, both in bamboos, and low near the ground in thick shrubbery. Soft parts: iris yellow; bill dark horn; feet brownish-white. Weight: ♂ 37 gr.

Actinodura egertoni khasiana Godwin-Austen: Shillong Bar-wing Babbler.

Three males and a female of this subspecies were taken in thick shrubbery both in evergreen forest and also in scrub jungle on the edges of pasture and village wood-cuttings from 3,750-7,700 ft. Weight: ♂♂ 38 (3), ♀ 34.5 gr.

Actinodura nipalensis waldeni Godwin-Austen: Walden's Bar-wing Babbler.

The commonest babbler in the evergreen forest on Mt. Japvo (type locality of the subspecies). We found this bird both there and on

Mt. Zephu from 7,700 feet up, high in the trees and low in thick scrub and masses of fallen branches and forest debris. There is considerable colour variation in a big series. Wing: ♂♂ 89.5-97, ♀♀ 86-99 mm. Some birds, both male and female are in semi-breeding condition (testes slightly enlarged or ovaries slightly granular) in November. Weight: ♂♂ (10) 39-56, ♀♀ (8) 41-53 gr.

***Siva ignotincta ignotincta* (Hodgson): Redtailed Minla.**

A bird of evergreen jungle found in the tree tops in mixed parties with other small babblers and warblers, from 5,250-7,700 ft. Males weighed 15-16.5, one female 16 gr.

***Siva strigula yunnanensis* Rothschild: Stripethroated Siva.**

This brightly coloured siva was one of the birds of the evergreen on Mt. Zephu from 7,700 ft. up, working in flocks through the tops of the oaks and rhododendrons. Soft parts: iris reddish brown or brown; bill upper mandible black, lower gray; feet gray.

Three specimens measure; wing ♂ 71, ♀ 66 (2) mm. Weight: ♂ 21, ♀♀ 17, 21 gr.

This form apparently occurs from the Mishmi Hills south through the Patkoi and the east Naga Hills in extreme eastern Assam, and is found farther south to Mt. Victoria.

I was surprised, on comparing my specimens, to discover that the series collected on Mt. Japvo in the Barrail Range of the western Naga Hills belong to an undescribed form which I hereby describe as:

***Siva strigula cinereigenae* n. subsp.**

Type.—No. 12,119, Yale Peabody Museum, ♂ ad., Mt. Japvo, western Naga Hills, Assam, November 4th, 1950; S. Dillon Ripley, coll.

From *yunnanensis* Rothschild (both series are in fresh plumage), this subspecies differs in having a whitish eye-ring and a whitish superciliary. The sides of the cheeks are gray, mottled with whitish and dusky, not olive-yellow, or even orange-tinted as in *yunnanensis*. Below, this form tends to be less bright, less brightly orange-yellow on the chin, less brightly yellow on the chest the sides of which are grayish, and on the abdomen. There is no significant difference in the tone of the upper parts, and the amount of chestnut on the tail is similar.

From *strigula* Hodgson of the Himalayas this subspecies differs in a somewhat darker, more brownish-orange tint to the crown and more olive-brownish upper parts, and in having a greater area of chestnut on the tail. The eye-ring, superciliary and cheeks are grayish rather than suffused with olive-yellowish as in *strigula*. Below, the chin patch is less bright but the tone of the underparts otherwise tends to be purer orange-yellow, less tinged with olive. The western Himalayan *simlaensis* is of course a much paler bird.

In worn specimens of this subspecies, the feathers of the back lose their warm brownish tone and become very gray progressively, starting from the nape.

Measurements (mm.);

	Wing	Tail	Culmen
5 ♂♂	66.5-71.5	64-73	12-13
7 ♀♀	63.5-67.5	44-69	12-13

Weight: ♂♂ 18.5-21, ♀♀ 17-19.5 gr.

Range: Barrail Range in western Naga Hills, and presumably Cachar.

Siva cyanuroptera cyanuroptera Hodgson: Bluewinged Siva.

A bird of evergreen or thick second growth mixed deciduous and evergreen from 4,700-6,000 ft. I often heard the species making a very chick-like 'cheep'. Males weighed from 16.5-18, a female 15.5 gr.

Yuhina castaniceps conjuncta (Mayr): Chestnutheaded Staphidia.

The little staphidia was found by us in the eastern Naga Hills only and proves to belong to the subspecies described by Mayr (1941) from the Myitkyina District of Burma, an extension into India of this form. These little crested birds flock through the deciduous trees from 2,000-4,000 ft. chittering and chattering and busying themselves in the undergrowth so exactly like the yuhinas, that at any distance in behavior and calls they would be indistinguishable. I feel that they belong to this group (in which they were first described by Horsfield and Moore) rather than in *Siva* where they were placed by Delacour (1946). The bill of this species is identical with *Yuhina*, and the only external difference I can find is in the tail which is slightly rounded.

Wing: ♂♂ ♀♀ 58-60 mm. Weight: ♂♂ 11.5-12.5 gr.

Yuhina flavicollis rouxi (Oustalet): Chestnutnaped Ixulus.

Specimens collected from 4,700-6,500 ft. prove to belong to the subspecies *rouxi*, named from west China, of which *harterii* (Harington) is a synonym. It is a somewhat more richly coloured form than typical *flavicollis*, particularly in the colour of the chestnut nape, the back and a slightly richer yellow wash on the underparts. From *baileyi* it differs by a darker crown and somewhat more suffused underparts, particularly in the rich olive-brown wash on the lower flanks and thighs. The differences certainly do not appear as striking as outlined in the 'Fauna' (loc. cit., p. 322-23).

Weight: ♂♂ 15.5-19, ♀ 16 gr.

Yuhina gularis gularis Hodgson: Stripethroated Yuhina.

Small flocks of this pretty rich brown crested yuhina with a noticeably buffy-mauve breast moved about restlessly in the tops of the oaks, maples, birches, and rhododendrons on Mt. Japvo. They have a reiterated rather mournful tinkling call. Soft parts: iris clay brown; bill, upper mandible dark brown, lower, basally brownish-yellow, distally dark brown; feet yellow, brownish-yellow, brownish-flesh. Weight: ♂♂ 20.5-24, ♀ 19 gr.

Yuhina nigrimenta nigrimenta Blyth: Blackchinned Yuhina.

The little Blackchinned Yuhina was common in small flocks along the trail from 2,500-3,000 ft. east of Phek, the only area we came

across it. It is busy and noisy in the light scrub and deciduous second growth along the trail, sometimes in the tall grass which grows under the trees. Soft parts: iris brown; bill upper mandible black, lower and gape pink, tip of lower mandible brown; feet pale brown. Weight: ♂♂ 9, 10, ♀♀ 8, 9 gr.

Yuhina zantholeuca zantholeuca (Blyth): Whitebellied Erpornis.

A single female taken at Phek weighing 12 gr. was our only record of this species.

Alcippe castaneiceps castaneiceps (Hodgson): Chestnutheaded Babbler.

A series of 15 specimens of the Chestnutheaded Babbler seem entirely indistinguishable from typical *castaneiceps*, with the distinction that birds from eastern Nepal eastward tend to be very slightly richer coloured in fresh plumage as I pointed out (1950). There is every sort of variation in this species, and post-mortem changes are great. Wear also is important, and the recent description of *garoensis* Koelz (1951) from birds taken in February, sounds like worn birds. The race *brunneicauda* (Sharpe), described from a single old skin from Shillong, and given a range; 'Khasia Hills, Cachar Hills and probably Manipur', by Baker (loc. cit., p. 289), must presumably be the form we found so common on Mt. Japvo which is the same Barrail Range as the North Cachar Hills. These birds are typical *castaneiceps*, showing a characteristic variation in the colour of the crown, back, underparts, edge of wing, and size of malar stripe.

Soft parts: iris reddish brown; bill, upper mandible dark brown, lower grayish-brown; feet yellowish-brown brownish-yellow. Weight: ♂♂ 10-11, ♀♀ 8-11 gr.

Alcippe vinipectus austeni (O.-Grant): Godwin-Austen's Fulvetta.

A pair collected among the gnarled branches of rhododendrons at 9,000 ft. on Mt. Japvo were the only specimens seen by us. Hume (1888) records Godwin-Austen as having obtained the species at the same altitude on the same mountain in the winter of 1872-73. These two birds measure: wing ♂ 58, ♀ 56; tail ♂ 56, ♀ 57; culmen ♂ 10.5, ♀ 10 mm. Soft parts: iris clay colour; bill, upper mandible dark brown, lower light brown; feet brownish-white. Weight: ♂ 12.5, 11 gr.

Mayr (1941, p. 79) described *perstriata* from the North Burma ranges between the upper Chindwin and Irrawady Rivers without mentioning *austeni*. It is perhaps worthwhile here to record that *perstriata* differs from *austeni* in the darker, more blackish streaking on the throat, which in *austeni* is rufous-brown. The ear coverts of *perstriata* also are more blackish. In *perstriata* the white superciliary begins at the lores. In *austeni* this starts over the eye, and anterior to that there is merely an indication of a stripe in a rather grayish suffusion to the upper blackish part of the lores. The black edging above the white superciliary seems somewhat more extended back to the nape than in *austeni*. The rest of the plumage is similar in colour tone and the two forms are in fact rather close. I itemize the

differences between them, as these are perhaps the only freshly-collected skins of *Alcippe vinipectus austeni* at present in collections.

***Alcippe cinereiceps manipurensis* (O.-Grant): Manipur Fulvetta.**

As the original specimens of this species in the British Museum are so totally foxed as to be quite useless for any colour comparison it might perhaps be worth while to describe the three specimens of this form obtained by us on Japvo and Zephu. Above, these birds are between hair brown and broccoli brown on the crown shading to a slightly paler tone on the back. The rump and outer edges of the secondaries are tawny olive. There are seal brown superciliary stripes prolonged back to the beginning of the nape. Below, the birds are drab or ecru-drab with tawny olive flanks and thighs with distinct mummy brown or mars brown streaks on the throat and upper breast. The outer edges of the primaries are silvery-gray.

Measurements: wing ♂♂ 55.5, 56, ♀ 51.5; tail ♂♂ 52.5, 53.5, ♀ 49.5; culmen ♂♂ 10, 10.5, ♀ 10 mm. Weight: ♂♂ 10 (2), 9.5 gr.

Soft parts: iris ♂♂ yellowish-brown, pale pinkish-brown, ♀ brown; bill ♂♂ black, ♀ dark brown; feet ♂♂ brown or grayish-brown, legs dark brown, ♀ brownish-flesh.

These birds were taken from 8,000-8,200 ft. in thick evergreen forest, high in the trees. One which I shot was making a tit-like 'cheep' call.

***Alcippe dubia mandellii* Godwin-Austen: Assam Tit-babbler.**

We ran across small parties of these prettily-patterned Tit-babblers from 4,700-6,000 ft. often associated with *Stachyris* species, in thick bushes and heaps of brush. Males and females weighed from 16.5-19 gr.

***Alcippe nipalensis commoda* Ripley: Nepal Babbler.**

Males and females of this form were taken from 3,500-4,800 ft. in pasture land and areas of cut-over scrub. Males and females have wing measurements from 57-61 mm. Weight: 13-16 gr.

I was disappointed not to run into the slightly larger quaker-babbler, the type locality for a race of which, *fusca*, is the Naga Hills.

***Heterophasia gracilis* (McClelland): Gray Sibia.**

This delicately coloured bird was a prominent feature of the Naga Hills from 4,500-7,500 ft. in open deciduous forest, in isolated trees near habitations, and in thick jungle of evergreen type, feeding with bulbuls or associating with mixed hunting parties. The eastern Angami name is 'Titi', perhaps with reference to its chattering call.

Soft parts: iris red, reddish-brown, to brown; bill black; legs dark brown to black, pads yellow.

Weight: ♂ ♀ 34-42 gr. Wing: 10 ♂ ♀ 84-95 mm. I prefer to maintain *gracilis* as a distinct species.

***Heterophasia pulchella* (Godwin-Austen): Beautiful Sibia.**

These freshly collected specimens of *pulchella* from the type locality of the species, the Naga Hills, prompted me to examine the

race *coeruleotincta* Rothschild (1921). From rereading the original description I can only presume that very old foxed specimens of *pulchella* were used for comparative material, which possibly was the case. In fresh plumage, nominate *pulchella* is bright 'blue-grey' on the head and back to quote the original description of *coeruleotincta*, 'the primaries being edged with brighter blue, and in the central rectrices being olivaceous amber-brown' etc. The description of the Yunnan form in fact reads like the description of *pulchella*. There is no real difference in size, 10 males and females having wings of 88-104 mm., in contrast to four males and females in the type series having wings of 93-104 mm. Weight: ♂ ♀ 35-47 gr. From the above it would seem useful to synonymize the name *coeruleotincta*.

This species was found only in the tree tops in evergreen forest from 7,700-8,600 ft.

Subfamily SYLVIINAE

Seicercus affinis (Hodgson): Allied Flycatcher-warbler.

A male from Mt. Japvo taken at 7,700 ft. with a flock of other warblers and babblers, has a wing measurement of 58 mm. Soft parts: iris brown; bill, upper mandible dark brown, lower yellow; feet yellow. Weight: 8 gr.

Seicercus burkii burkii (Burton): Blackbrowed Flycatcher-warbler.

During our stay in the Naga Hills we found only three specimens of this form from 4,700 and 7,700 ft. in heavy forest. Weight: ♂ ♀ 7-8 gr.

Seicercus xanthoschistos tephrodiras Sick: Mt. Victoria Grayheaded Flycatcher-warbler.

This is a darker more richly coloured form than typical *xanthoschistos*. This gray-headed and gray-backed little yellow warbler was a common feature along the trail east of Phek from 3,500-4,900 ft. in the deciduous trees which overhung the path. They were quite silent, but flitted busily in the trees at medium heights overhead. Weight: 6.5-7 gr. Wing: 6 ♂ ♀ 51-54 mm.

Seicercus castaniceps subsp.: Chestnutheaded Flycatcher-warbler.

A single male taken on November 9th on Japvo at 7,700 ft. is our only record of this species. Unfortunately it was later mislaid, probably in the packing of our material. It was in medium height trees with a flock of hunting warblers and babblers. The call was quite distinctive, a very loud wren-like 'tsick' which immediately attracted my attention to it. Soft parts: iris brown; bill upper mandible dark brown, lower yellowish-brown, feet light brown, pads yellow. Weight: 6 gr.

Recently Koelz (1951) has described a race *nagaensis* from one specimen taken at Kohima not differing in size but in colour as follows: 'chestnut on crown much deeper, so much so that the lateral stripes on crown are not very prominent; the white spot on the nape is very much reduced; the gray above extends almost to the middle of the back; the white on the abdomen is much more extensive.' As true *castaniceps* is found all over the area south to Manipur and the Chin

Hills, and as colour variation is likely to exist when only one specimen is considered, I am inclined to doubt the validity of this form, which, as proposed is confined to a range of a sort of 'island' in a sea of typical *castaniceps*.

Seicercus poliogenys Blyth: Graycheeked Flycatcher-warbler.

A male of this little flycatcher-warbler weighed 7, two females 6 gr.

Phylloscopus pulcher pulcher Blyth: Orangebarred Willow-warbler.

We came upon this willow-warbler occasionally in heavy forest from 4,700-8,600 ft., always in evergreen, sometimes immensely high on the tops of the biggest trees. It seemed not to be a part of the large mixed hunting parties, but usually just in willow-warbler groups. Males and females weighed 5-7 gr. Soft parts: iris brown; bill blackish or dark brown, base of lower mandible yellowish-brown or yellowish-horn; feet brown, dark greenish-brown, yellowish-brown, pads yellow.

Phylloscopus inornatus inornatus (Blyth): Crowned Willow-warbler.

Taken by us from 2,500-4,700 ft. in open deciduous scrub, usually rather high in the trees. Males and females weighed from 5-7 gr.

Phylloscopus inornatus mandellii (Brooks): West China Crowned Willow-warbler.

This rather darker willow-warbler is indistinguishable from the former in the field and seemed to occur in the same areas, but more commonly. Eight specimens were taken to the five of *inornatus*, from 2,500-6,000 ft. Weight: 4.5-6 gr.

Phylloscopus proregulus newtoni Gaëtke: Pallas's Himalayan Willow-warbler.

As I pointed out (1950) this name is available for the darker eastern population of this willow-warbler, as *chloronotus* must be confined to Nepal. A common species from 3,500-7,000 ft. in mixed deciduous and evergreen association, sometimes in small trees beside the trail, at other times high up in denser growth. Found in mixed flocks with *Chloropsis*, *Heterophasia gracilis*, *Picumnus*, and *Parus monticolus*. Weight: 11 ♂♂ ♀♀ 4-6 gr.

Phylloscopus maculipennis maculipennis Blyth: Grayfaced Willow-warbler.

A bird of thick forest from 6,000 ft. up. We found these birds high up in the trees with mixed babbler-warbler hunting flocks. Weight: 4.5-6 gr.

Phylloscopus reguloides assamensis Hartert: Crowned Willow-warbler.

A bird of forest, found in mixed parties from 4,700-7,700 ft. I recall it making typical 'cheep' notes in a flock of *Alcippe* and *Stachyris* in light scrub and low second growth pasture land near a village.

Orthotomus sutorius luteus Ripley : Mishmi Tailor-bird.

The tailor-bird taken by us from the Naga Hills and northern Manipur is darker, more rufous on the forehead and forecrown than toptypical *patia* from Nepal, and matches *luteus* from the Mishmi Hills. It is also more richly washed with buff below than in *patia*. A female from near Yisi at 3,500 ft. weighed 7.5 gr., a Manipur female 8.5 gr.

Orthotomus cucullatus coronatus Blyth : Yellowbellied Tailor-bird.

A single sex undetermined specimen is indistinguishable from Sikkim birds. Soft parts: iris brown; bill upper mandible black, lower basally orange, distally horn; feet brownish flesh. Weight: 6 gr.

Prinia hodgsoni rufula Godwin-Austen : Himalayan Gray-breasted Wren-warbler.

In the tall weeds and grass from 2,900-4,500 ft. we came across these active little wren-warblers in small flocks. It was less common than the following species. Weight: ♂ ♀ 5-7 gr.

Prinia rufescens rufescens Blyth : Assam Wren-warbler.

A very common bird along the trail east of Phek from 2,500-5,000 ft. in patches of light grass under clumps of deciduous trees. Often found in mixed hunting parties with *Alcippe*, *Stachyris*, and other babblers. We heard it often make rather harsh grating or churring trills. Eight males and females weighed from 6.5-7 gr. Wing: ♂ ♂ ♀ ♀ 42-46 mm.

Prinia atrogularis khasiana (Godwin-Austen): Austen's Hill-warbler.

A young male, subadult and very rufous above, was taken near Kohima in mid-October, and an adult female at Phek. The birds have a rather grating series of low call notes. We found them in long grass on the edge of cultivated patches on the steep hillsides. Weight: ♀ 11.5, young ♂ 9 gr.

Cettia montana fortipes (Hodgson): Strong-footed Bush-warbler.

In tall grass along the trail beyond Phek we ran into these shy skulking bush-warblers, behaving in a very wren-like way in the tall grass, usually almost impossible to see. They called simply a single alarm note, 'tsick'. Soft parts: iris brown; bill dark brown, base of lower mandible pinkish-horn; feet pale brownish-flesh, or yellowish-brown. Weight: ♂ 10, ♀ ♀ 7.5, 9.5 gr.

Cettia flavolivacea alexanderi (Ripley): Naga Hills Aberrant Warbler.

Two specimens of this dark olive-buff subspecies were collected along the trail beyond Phek in tall grass. We heard definitely only a 'tsick' call from this form, but several times we heard a short grating song which Alexander found very reminiscent of what he had been told was *flavolivacea* in west China. This is a much darker bird than typical *flavolivacea* of the Himalayas, more richly coloured than *weberi* of Mt. Victoria and darker, more buffy (especially below) than *intricata*. Weight: ♀ ♀ 6, 7 gr.

Subfamily MUSCICAPINAE

Muscicapa strophhiata strophhiata (Hodgson): Orangegorgetted Flycatcher.

The commonest flycatcher in the Hills, taken from 3,500 ft. up, but particularly numerous in the evergreen on Japvo at 7,700 ft. Males weighed from 11-14, females 11-12.5 gr.

Muscicapa parva albicilla Pallas: Eastern Redbreasted Flycatcher.

A male from Kohima weighed 9 gr.

Muscicapa amabilis Deignan: Rustybreasted Blue Flycatcher.

This is a new name (1947) for *Siphia hodgsonii* Verreaux, listed in the Fauna (Vol. II, p. 216, and Vol. VII, p. 132). A single bird in brown plumage, possibly a subadult male was taken on Japvo at 7,000 ft. on the edge of the evergreen. Weight: 9 gr.

Muscicapa hyperythra hyperythra Blyth: Rufousbreasted Blue Flycatcher.

Two females taken on Japvo in the understorey in heavy evergreen forest were noted from the harsh and snapping noise they made as they flew to a perch. Wing 56, 58 mm. Weight: 7.5, 9 gr.

One bird is very rufescent below with a pronounced tawny-buff streak from the lores to the eye-ring. So richly coloured is this specimen that I had difficulty identifying it. The other presumed 'female' weighing 9 gr. is possibly a subadult male as I can just detect the faintest tinge of gray-blue to the forehead area.

Muscicapa sapphira (Tickell): Sapphireheaded Flycatcher.

A single male in the brown-headed stage of plumage was taken in evergreen forest on Japvo at 8,550 ft. It weighed 8 gr.

Muscicapa westermanni indochinensis Ripley: Eastern Little Pied Flycatcher.

I have recently revised this species (1952), hence the name for the darker, more rufous-rumped eastern population of this widely distributed species. A male taken at Phek weighed 10 gr.

Muscicapa thalassina thalassina Swainson: Verditer Flycatcher.

Found by us at 7,000 ft. on Japvo perching on the edge of the forest in old dead trees near cultivation, and hawking for insects. Weight: ♂ 17.5 gr.

Muscicapa solitaris leucops (Sharpe): Whitegorgetted Flycatcher.

A female from Phek is our only specimen of this shy flycatcher. Weight: 11 gr.

Niltava macgrigoriae (Burton): Small Niltava.

Not uncommon in thick scrub near streams from 2,500-4,500 ft. Weight: ♂♂ ♀♀ 11-13 gr.

Culicicapa ceylonensis calochrysea Oberholser: Grayheaded Flycatcher.

A male from Kohima weighed 8 gr.

Rhipidura hypoxantha Blyth: Yellowbellied Fantail Flycatcher.

Not uncommon on forest edges or in heavy deciduous patches along the trail east of Phek. The distinctive 'cheep' of this busy little fellow always gave him away. Three males weighed 5 gr. each.

Rhipidura albicollis albicollis (Vieillot): Whitethroated Fantail Flycatcher.

Found by us in heavy evergreen forest from 4,100-7,700 ft. Weight: ♂♂ ♀♀ 9-12 gr.

PARIDAE

Parus monticolus Vigors: Greenbacked Tit.

From 4,300-6,000 ft. this seemed to be the common tit of the scrub pasture land, light deciduous forest, and occasionally on the fringes of heavier jungle. I would characterize the song of this species as a series of three notes, rather musical, 'pling pling pling,' followed by a double note 'tee-eurp'. Weight: ♂♂ ♀♀ 12-16 gr.

Parus xanthogenys spilonotus Blyth: Blackspotted Yellow Tit.

A male taken at 6,000 ft. in evergreen forest at Phek is our only record for this form. Weight: 18 gr. Wing 77 mm.

Parus modestus modestus (Burton): Yellowbrowed Tit.

A bird of evergreen forest from 7,700 ft. up. Six males and females weighed 7-7.5 gr.

Aegithaliscus concinnus manipurensis Hume: Hume's Redheaded Tit.

A species found by us usually in the pines (*P. longifolia*) from 4,700-6,000 ft. It is reproduced herewith (Plate III) to show the distinctive pattern and dark colour. Weight: ♂♂ 5.5-7, ♀ 5.5 gr.

Melanochlora sultanea sultanea (Hodgson): Sultan Tit.

A male taken at 2,500 ft. in deciduous forest near the Tizu River weighed 41 gr.

SITTIDAE

Sitta himalayensis australis Koelz: Naga Hills Whitetailed Nuthatch.

Koelz (1951) describes this new race from the Naga Hills as being; 'underside clear chestnut, deeper posteriorly and fading to white on the centre of throat and chin, quite unlike the nominate race where a paler chestnut is restricted to the vent and flanks, and where the abdomen and breast are rather pale rufous. In *S. h. australis* the postocular stripe stops short on the neck, and is not produced to the shoulders as in the nominate race. Bill stouter in this new race.'